DERWENT-ACC-NO: 1991-067099

DERWENT-WEEK: 199607

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TITLE: Clutch control in continuously

variable transmission

system - has sensor supplying trigger

value when forward

mode is selected and supplies trigger

when reverse mode

is selected

INVENTOR: PETZOLD, W P

PRIORITY-DATA: 1989US-0402052 (August 31, 1989)

PATENT-FAMILY:

PUB-NO PUB-DATE PAGES MAIN-IPC LANGUAGE EP 415523 A March 6, 1991 N/A 000 N/A N/A DE 69023839 E January 11, 1996 B60K 041/22 000 US 5007512 A April 16, 1991 N/A N/A 000 N/A CA 2019796 A February 28, 1991 N/A 000 EP 415523 B1 November 29, 1995 E B60K 041/22 020

INT-CL (IPC): B60K017/04, B60K041/00, B60K041/22

ABSTRACTED-PUB-NO: EP 415523A

BASIC-ABSTRACT:

The **control logic** provides a preselected time interval for sensing of a

pressure drop associated with the transition from one operating mode to

another, such as from neutral to forward. The system provides for sensing that

pressure drop and providing a desired fluid flow rate for clutch actuation

consistent with the desired performance. The system also monitors pressure in

the fluid actuation system at the end of the predetermined interval to

ascertain when the pressure reaches a desired higher level indicative of a

control characteristic to provide desired vehicle response to driver demand.

Fluid flow to the clutch is controlled at a corresponding rate to provide a

desired operating characteristic and to facilitate transition into a subsequent

vehicle operating mode. Length of time frame for the associated timer depends

upon characteristics of specific engines. The timer times out in a time

normally required for reaching the desired, second pressure level to allow

transition to subsequent operator mode.

USE - Motor Vehicle.

ABSTRACTED-PUB-NO: EP 415523B

EOUIVALENT-ABSTRACTS:

A <u>continuously variable transmission</u> system operable in a plurality of

operating modes including a forward and a reverse mode, said system including a

clutch control system for controlling fluid flow under pressure to actuate a

clutch (28), characterised in that the clutch control system comprises pressure

sensing means for sensing whether the pressure of said actuating fluid is less

than a first preselected trigger value, and means responsive to said pressure

sensing means for providing fluid flow at a first rate to said clutch (28) when

said sensed pressure is less than said first trigger value.

US 5007512A

The improved clutch control system monitors driver

selection of forward or reverse and implements the specific parameters for each. The **control logic** provides a preselected time interval for sensing of a pressure drop associated with the transition from one operating mode to another, such as from neutral to forward. The system provides for sensing that pressure drop and providing a desired fluid flow rate for clutch actuation consistent with the desired performance.

The system also monitors pressure in the fluid actuation system at the end of the predetermined interval to ascertain when the pressure reaches a desired higher level indicative of a control characteristic to provide desired vehicle response to driver demand. Fluid flow to the clutch is controlled at a corresp. rate to provide a desired operating characteristic and to facilitate transition into a subsequent vehicle operating mode. Length of time frame for the associated timer depends upon characteristics of specific engines. The timer times out in a time normally required for reaching the desired, second pressure level to allow transition to subsequent level to allow transition to subsequent operating mode.

USE - For continuously variable transmission driven vehicle. @(14pp)@

----- KWIC -----

Basic Abstract Text - ABTX (1):

The <u>control logic</u> provides a preselected time interval for sensing of a pressure drop associated with the transition from one operating mode to another, such as from neutral to forward. The system provides for sensing that pressure drop and providing a desired fluid flow rate for

clutch actuation consistent with the desired performance. The system also monitors pressure in the fluid actuation system at the end of the predetermined interval to ascertain when the pressure reaches a desired higher level indicative of a control characteristic to provide desired vehicle response to driver demand.

Derwent Accession Number - NRAN (1): 1991-067099

Title - TIX (1):

Clutch control in <u>continuously variable transmission</u>
system - has sensor
supplying trigger value when forward mode is selected and supplies trigger when reverse mode is selected

Equivalent Abstract Text - ABEQ (1):

A continuously variable transmission system operable in a plurality of operating modes including a forward and a reverse mode, said system including a clutch control system for controlling fluid flow under pressure to actuate a clutch (28), characterised in that the clutch control system comprises pressure sensing means for sensing whether the pressure of said actuating fluid is less than a first preselected trigger value, and means responsive to said pressure sensing means for providing fluid flow at a first rate to said clutch (28) when said sensed pressure is less than said first trigger value.

Equivalent Abstract Text - ABEQ (2):

The improved clutch control system monitors driver selection of forward or reverse and implements the specific parameters for each. The **control logic** provides a preselected time interval for sensing of a pressure drop associated

with the transition from one operating mode to another, such as from neutral to forward. The system provides for sensing that pressure drop and providing a desired fluid flow rate for clutch actuation consistent with the desired performance.

Equivalent Abstract Text - ABEQ (4):

USE - For continuously variable transmission driven vehicle. @(14pp)@